GE
Energy

Bruce Pellegrino
Government Relations Leader
GE Inspection Technologies

199 Hwy. 206
Flanders, NJ 07836
USA

T 973 440 6801
C 973 418 1580

http://www.ge-mcs.com/en/inspection-technologies

VIA FAX AND OVERNIGHT MAIL
(301) 492-3446

August 19, 2011

7/11/2011
76FR40755
(7)

Ms. Cindy Bladey
Chief, Rules, Announcements, and Directives Branch (RADB),
Office of Administration
Mail Stop: TWB-05-B01M
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Re: **Nuclear Regulatory Commission Docket ID NRC-2009-0279, "Impact of Reduced Dose Limits on NRC Licensed Activities Solicitation of Public Comment," 76 Fed. Reg. 40755 (July 11, 2011)**

Dear Ms. Bladey:

GE Inspection Technologies, a business within the General Electric Company, appreciates the opportunity to provide comments on NRC NUREG/CR-6112 (May 1995) in response to the subject notice. The information presented below is intended to provide an update on the development of certain technologies since that report, which support the NRC's goals of achieving greater alignment with the 2007 recommendations of the International Commission on Radiological Protection (ICRP) to reduce human exposure to ionizing radiation. Advances in technologies and additional exposure data could make meeting those recommendations more achievable than previously thought.

GE Inspection Technologies designs and manufactures Nondestructive Testing (NDT) equipment used for new-make or in-service inspection at power plants, refineries, offshore oil production facilities and industry in general. More specifically, technologies such as Ultrasound, Electro-magnetic, Visual and Radiography are applied to a very wide range of applications such as weld integrity, heat exchanger inspection and corrosion detection and monitoring.

Utilizing technology adopted by the medical profession and developed by GE Healthcare, GE Inspection Technologies has created industrial products utilizing Digital Radiography (DR) and Phased-array Ultrasonic Testing (PAUT). Both of these technologies require less or no penetrating radiation compared to traditional technologies, resulting in improved worker safety through lower radiation exposure.

SUNSI Review Complete
Template - ADM-013

E-RIDS = ADM-03
Add = T. Brock (Tab 2)

DR panels attached directly to a laptop computer with appropriate viewing software can replace existing film technology in many cases. DR panels have several inherent benefits over film, including instant "real-time" results, digital data formats for sharing and archiving and significantly reduced exposure requirements. The lower radiation exposure is realized through lower energy levels and shorter exposure times. Some of our Oil & Gas customers are seeing a 100 times improvement regarding lower energy levels or shorter exposure times, along with better imaging results. In many cases, customers are moving away from high-energy isotopes to either lower-energy ones or even X-ray generators.

PAUT, having evolved rapidly over the past several years due to improvements in small, light-weight and low-cost electronics and image processing software, is able to image complex structures such as welds, castings, pipe walls and composite materials in aircraft and windmill blades. PAUT completely eliminates exposure to ionizing radiation.

GE Inspection Technologies is pleased to provide these technologies and to work with the end-user community including commercial and government asset owners, inspection service providers, regulators and applicable codes & standards groups to help accelerate the adoption of these two fast-evolving technologies into the workplace to help lower workers' exposure to unnecessary radiation.

We believe that increased adoption of DR and PAUT technologies would decrease exposure to ionizing radiation and help the NRC meet the exposure recommendations of the ICRP, through lowering exposures traditionally observed in the NDT test environment. We hope you will keep these technologies in mind during discussions on possibilities for radiation exposure reductions.

Thank you for this opportunity to comment and feel free to contact me if you have any questions.

Sincerely,

Bruce A. Pellegrino

Cc:

Jeff Anderson
Jessica Wenzell
George Pickart
Juan Mario Gomez